

The RT-1829(P)/S provides up to four full-duplex UHF DAMA satcom channels in a ruggedized chassis to meet environmental requirements.



FOUR-CARD TERMINAL — STANDARD 19-INCH CABINET WITH ROOM FOR GROWTH

The RT-1829(P)/S UHF satcom terminal provides from one to four UHF satcom channels using a VME64x open architecture that enables easy modification of configuration or selection of only the features necessary to meet user requirements. When combined with an external power amplifier, LNA/diplexer, and antenna, the RT-1829(P)/S provides a complete low-cost, shipboard qualified, UHF satcom terminal that can meet all Legacy Demand Assigned Multiple Access (DAMA) and Integrated Waveform (IW) MIL-STDs.

The core terminal is made up of four VME modules: (single channel) 5/25 kHz IW, DAMA & non-DAMA modem; four-port input/output (I/O) module; UHF upconverter (U/C), and UHF downconverter (D/C). Additional available slots on the RT-1829 can accommodate up to three additional independent channels or alternatively mix and match variations of other VME-based functions such as additional I/O modules (maximum of 8 I/O ports per channel).

The RT-1829(P)/S provides full-duplex UHF DAMA satcom channels in a ruggedized chassis to meet environmental requirements. All ViaSat IW, DAMA, and DASA terminals can conform to MIL-STD-188-181B, -181C, -182A, -182B, -183, and -183B. A simple software download will upgrade the terminal to the latest MIL-STD revisions as they become available.

EXPANDABLE — OPEN VME ARCHITECTURE FOR MODULAR GROWTH

The VME64x architecture of the RT-1829(P)/S promotes modularity and growth of the terminal. You can add additional channels by adding a set of four VME cards. Additionally, each channel can operate either UHF satcom only or both UHF satcom and LOS by selection of the appropriate U/C and D/C modules. The open architecture enables low-cost growth paths for other features and functions.

VIASAT CONTROL INDICATOR — OR USE OTHER CONTROL OPTIONS

The RT-1829(P)/S may be controlled by a variety of means including the ViaSat Control Indicator or ViaSat's Network Terminal Control (VNTC) software application.

SPECIFICATIONS

GENERAL CHARACTERISTICS

Operating Modes	25 kHz DAMA	5 kHz DAMA	Non-DAMA
User I/O Rate (bps)	75, 300, 600, 1,200, 2,400, 4,800, 16,000	75, 300, 600, 1,200, 2,400	1,200, 2,400, 4,800, 6,000, 7,200, 8,000, 9,600, 19.2K, 28.8K, 38.4K, 48K, 56K
Burst Rate	9.6, 19.2, 32 ksp/s	600, 800, 1,200, 2,400, 3,000 sp/s	N/A
Modulation	BPSK, DEQPSK	SOQPSK	SBPSK, FSK, CPM
Coding	R1/2, 3/4	R1/2, 3/4, 7/8	RS
I/O Ports	8	2	1

Control

» **MIL-STD-188-114:** ViaSat Control Indicator

» **Ethernet:** PC or Workstation

IW All mandatory rates supported

Key Fill KYK-13, KYX-15, KOI-18, AN/CYZ-10, SKL

INTERFACES

Data MIL-STD-188-114 compatible balanced or unbalanced; synchronous data, clock and control

Compatible COMSEC AN/USC-43 (ANDVT), KY-99A, KY-100, KY-58, KG-84A/C; KIV-7 and others

Frequency Reference Input 1, 5 or 10 Mhz STD, 0 ± 10 dBm

RF Interface

» **TX:** 292 to 318 Mhz, 50 ohms

» **RX:** 243 to 270 Mhz, 50 ohms

Remote Control Via Ethernet or MIL-STD-188-114 compatible asynchronous allowing interface to RS-422, RS-423 and RS-232

Power Source 120 VAC, 50/60 Hz or 240 VAC, 50 Hz

HPA Control MIL-STD-188-114 compatible asynchronous allowing interface to RS-422, RS-423 and RS-232

PERFORMANCE CHARACTERISTICS

Frequency Offset Acquisition with up to ± 1200 Hz offset

Doppler Correction Uplink for operation with narrow bandwidth acquisition modems (e.g., TD-1271)

BER Within 1.5 dB of theory

Acquisition Typically < 5 sec

PHYSICAL CHARACTERISTICS

Dimensions (HD) 15.25 x 24.0 in

Volume < 7200 cubic in

Weight < 100 lb

ENVIRONMENTAL/EMI

Operation Temperature 0° C to 50° C

Altitude 0 to 15,000 ft

Humidity 100%

Vibration MIL-STD-167

Shock MIL-STD-901D

Salt Fog MIL-STD-5400

Cooling Natural convection cooled (no forced air)

EMI MIL-STD-461D

WAVEFORM CAPABILITIES

MIL-STD-188-181B/C

MIL-STD-188-182A/B

MIL-STD-188-183A/B



CONTACT

6155 EL CAMINO REAL, CARLSBAD, CA 92009

SALES

TEL 760.522.4482 FAX 760.929.3968 EMAIL GOV.SATCOM@VIASAT.COM WEB WWW.VIASAT.COM

TECHNICAL SUPPORT

TEL 760.476.2457

